Table 1: Modify Text Attributes

REQ_BY_REL	PARAGRAPH_ID	OBJECT_ID	RELEASE	TEXT	CLARIFICATION	REQ_INTERPRETATION	REQ_CATEGORY	SEGMENT_ALLOCATION	REQ_TYPE	S_VERIFICATION_METHOD	S_VERIFICATION_STATUS	A_VERIFICATION_METHOD	A_VERIFICATION_STATUS	CCR
CC	AM1-0020#B	9422	B	The EOC shall have the capability to send (via EDOS/EBnet and the SN, AGS, SGS, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106).			mission critical	FOS | CSMS	interface	test	~~un-verified~~	test	~~un-verified~~	97-0685A
CT	AM1-0020#B										verified		verified	
CC	AM1-0030#B	9423	B	The EOC shall have the capability to send (via EDOS/EBnet and			mission critical	FOS | CSMS	interface	test	~~un-verified~~	test	~~un-verified~~	97-0685A

				the SN, AGS, SGS, or WOTS) and the AM-1 spacecraft shall have the capability to receive instrument commands in CCSDS CLTUs (as defined in AM-1 ICD 106).										
CT	AM1-0030#B										verified		verified	
CC	AM1-0050#B	9588	B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time			mission critical	FOS | CSMS	interface	test	~~un-verified~~	test	~~un-verified~~	97-1134A

				AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, AGS, SGS, or WOTS interfaces.										
CT	AM1-0050#B										verified		verified	
CC	AM1-0120#B	9598		The EOC shall have the capability to send and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106) via pre-launch		Ecom is considered to be EBnet.	mission critical	FOS | CSMS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A

				test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.										
CT	AM1-0120#B										verified		verified	
CC	AM1-0125#B	9592		The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 housekeeping telemetry packets (as defined in AM-1 ICD		Ecom is considered to be EBnet.	mission critical	FOS | CSMS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A

				106) via pre-launch test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.										
CT	AM1-0125#B										verified		verified	
CC	AM1-0150#B	9427	B	The EOC shall have the capability to send and the SSIM shall have the capability to receive AM-1 spacecraft and instrument commands in CCSDS CLTU format (as defined in AM-1 ICD-106).			mission essential	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-0685A
CT	AM1-0150#B										verified		verified	
CC	AM1-0160#B	9428	B	The SSIM			mission essential	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-0685A

				shall have the capability to send and the EOC shall have the capability to receive simulated real time AM-1 spacecraft and instrument housekeeping telemetry packets and Command Link Control Words (as defined in AM-1 ICD-106).										
CT	AM1-0160#B										verified		verified	
CC	AM1-0215#B	9603		The AM-1 spacecraft vendor shall have the capability to provide and the EOC shall have the capability to receive, AM-1			mission essential	FOS	interface	test	~~un-verified~~	test	~~un-verified~~	97-1134A

				project data base information containing both spacecraft and instrument parameters.										
CT	AM1-0215#B										verified		verified	
CC	AM1-0230#B	9594	B	The IST toolkit shall have the capability to accept data from a science computing facility that supports PI/TL operations, which include the following data (at a minimum): a. instrument microprocessor memory loads. b. changes in the			mission essential	FOS	interface	test	~~un-verified~~	test	~~un-verified~~	97-1134A

				instrument parameters										
CT	AM1-0230#B										verified		verified	
CC	AM1-0340#B	9439	B	The AM-1 project shall have the capability to provide and ECS shall have the capability to accept and store AM-1 spacecraft and instrument hardware and software technical documentation.			mission fulfillment	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-0685A
CT	AM1-0340#B										verified		verified	
CC	AM1-1000#B	9440	B	ECS functions shall have an operational availability (computed as defined in the			mission essential	FOS | CSMS	interface | RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0685A

				Functional and Performance Requirements Specification for the ECS) of 0.96 at a minimum and a mean down time (MDT) of four (4) hours or less, unless otherwise specified.										
CT	AM1-1000#B										verified		verified	
CC	AM1-1010#B	9441	B	The ECS FOS shall have an operational availability of 0.9998 at a minimum and a MDT of one (1) minute or less for critical real time functions that			mission critical	FOS	interface | RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0685A

				support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety										
CT	AM1-1010#B										<u>verified</u>		<u>verified</u>	
CC	AM1-1020#B	9442	B	The ECS FOS shall have an operational availability of 0.99925 at a minimum			mission essential	FOS	interface | RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0685A

				and a MDT of five (5) minutes or less for non-critical real time functions.										
CT	AM1-1020#B										verified		verified	
CC	ASTER-0060#B	9093		ECS shall have the capability to send and ASTER GDS shall have the capability to receive an updated EOC operations data base, containing at a minimum, spacecraft and instrument telemetry formats, limits, and associated information and ASTER instrument command formats			mission critical	FOS	interface	test	~~un-verified~~	test	~~un-verified~~	97-0208A

				and associated information.										
CT	ASTER-0060#B										verified		verified	
CC	ASTER-0210#B	7957		ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument resource profiles and instrument resource deviation lists (when a resource profile exists).	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft		mission essential	FOS	interface	test	~~un-verified~~	test	un-verified	96-0980B

					& its instruments.									
CT	ASTER-0210#B										verified		verified	
CC	ASTER-2030#B	9134		The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine			mission critical	FOS	interface | RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0208A

				real time commanding and associated monitoring for spacecraft and instrument health and safety.										
CT	ASTER-2030#B										verified		verified	
CC	ASTER-2040#B	9135		The ECS FOS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity (TOOs).			mission critical	FOS	interface | RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0208A
CT	ASTER-2040#B										verified		verified	
CC	EOC-0030#B	7200		The EOC shall receive the LTSP and LTIP			mission critical	FOS | CSMS	functional	demo	~~un-verified~~	demo	~~un-verified~~	96-0956A

				from the SMC.										
CT	EOC-0030#B										verified		verified	
CC	EOC-2430#B	7910		The EOC shall, in 95 percent of all cases, generate a preliminary resource schedule for one spacecraft within 2 hours after all required inputs are available.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instrument		mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	96-0980B

					s.									
CT	EOC-2430#B										verified		verified	
CC	EOC-3238#B	9387		Within 1 minute of detecting a predefined emergency /contingency situation, the EOC shall prepare spacecraft and instrument commands for transmission to EDOS.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-0519A
CT	EOC-3238#B										verified		verified	
CC	EOC-4005#B	9545		The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the: a. SN b. AGS (for contingenc			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1089A

				y or emergency operations) c. SGS, (for contingency or emergency operations) d. WOTS (for contingency or emergency operations)										
CT	EOC-4005#B										verified		verified	
CC	EOC-4008#B	9523		The EOC shall be capable of transmitting commands via Ebnet.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1132B
CT	EOC-4008#B										verified		verified	
CC	EOC-4010#B	3723		For each spacecraft and its instruments, the EOC shall prepare uplink data that conform to the CCSDS		B: Enhanced functionality provided	mission critical	FOS	functional	analysis	~~un-verified~~	analysis		

				Telecommand Standard.										
CT	EOC-4010#B										verified			
CC	EOC-4130#B	3731		The EOC shall provide the capability to receive and evaluate command transmission status information from EDOS.			mission critical	FOS	functional	demo	~~un-verified~~	demo		
CT	EOC-4130#B										verified			
CC	EOC-4200#B	9527		The EOC shall support several uplink rates to the spacecraft, which include at a minimum the following: a. 10 kilobits per second (kbps) (SSA			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1132B

				uplink) b. 1 kbps (SMA uplink) c. 125 bits per second (bps) (SSA uplink during contingency operations) d. 2 kbps (emergency operations via S-band link)										
CT	EOC-4200#B										<u>verified</u>		<u>verified</u>	
CC	EOC-5130#B	3751		The EOC shall determine the best estimate for SCC memory contents.			mission critical	FOS	functional	test	~~un-verified~~	test		
CT	EOC-5130#B										<u>verified</u>			
CC	EOC-5185#B	3753		The EOC shall provide the FDF with a subset of telemetry stream,			mission critical	FOS	functional	test	~~un-verified~~	test		

				which includes the following: a. Attitude sensor data b. Navigation telemetry data c. Spacecraft maneuver telemetry data										
CT	EOC-5185#B										verified		verified	
CC	EOC-5190#B	3755		The EOC shall provide the capability to store spacecraft recorder housekeeping data as they are received from EDOS in CCSDS packets.			mission critical	FOS	functional	analysis	~~un-verified~~	analysis		
CT	EOC-5190#B										verified		verified	
CC	EOC-6020#B	9517		The EOC shall accept			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1089A

				instrument status data from each ICC.										
CT	EOC-6020#B										verified		verified	
CC	EOC-6130#B	3768		The EOC shall monitor the configuration of the spacecraft and instruments.			mission critical	FOS	functional	demo	~~un-verified~~	demo		
CT	EOC-6130#B										verified			
CC	EOC-6140#B	3770		The EOC shall provide the capability to maintain a record of the spacecraft and instrument configuration, including the state of all spacecraft subsystems and instruments.			mission critical	FOS	functional	test	~~un-verified~~	test		

CT	EOC-6140#B										verified		verified	
CC	EOC-7015#B	3777		The EOC shall receive from the ICCs instrument-specific portion of the PDB and/or any updates thereto.			mission critical	FOS	functional	test	~~un-verified~~	test		
CT	EOC-7015#B										verified		verified	
CC	EOC-7150#B	3789		The EOC shall store the technical documentation of the spacecraft hardware and software from before launch through the end of spacecraft operation.			mission fulfillment	FOS	functional	inspection	~~un-verified~~	inspection		
CT	EOC-7150#B										verified		verified	
CC	EOC-7160#B	9555		The EOC shall be capable of updating			mission fulfillment	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1089A

				the spacecraft technical documentation.										
CT	EOC-7160#B										verified		verified	
CC	EOC-8020#B	3792		The EOC shall participate in the scheduling of interface and end-to-end tests with the external elements involved, including the ICCs, the spacecraft simulator(s), the SMC for other EOS elements, and EDOS for MO&DSD data delivery systems.			mission critical	FOS	functional	inspection	~~un-verified~~	inspection		
CT	EOC-8020#B	3792									verified		verified	
CC	EOC-8100#B	3794		The EOC shall			mission critical	FOS	functional	test	~~un-verified~~	test		

				perform prepass operational readiness tests on the EOC and between the EOC and external interfaces (via test messages).										
CT	EOC-8100#B	3794									verified		verified	
CC	EOC-8140#B	9394		The EOC shall manage initialization and shutdown of EOC functions.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-0519A
CT	EOC-8140#B										verified		verified	
CC	EOC-8260#B	9539		The EOC shall provide tests for validating, verifying, and checking functional capabilities and performance for			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1089A

				EOC functions after the EOC has been repaired or upgraded.										
CT	EOC-8260#B										verified		verified	
CC	EOC-8270#B	3805		The EOC shall provide standard test data sets to be used in the validation of EOC functions.			mission essential	FOS	functional	inspection	~~un-verified~~	inspection		
CT	EOC-8270#B										verified		verified	
CC	EOC-8330#B	3809		The EOC shall provide the capabilities: a. To test both nominal operations and failure paths b. To log test activities and test configurati			mission essential	FOS	functional	inspection	~~un-verified~~	inspection		

				on c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results										
CT	EOC-8330#B										verified		verified	
CC	EOC-9110#B	3819		The EOC shall respond to operator inputs within 0.5 seconds.			mission critical	FOS	functional	demo	~~un-verified~~	demo		
CT	EOC-9110#B										verified		verified	
CC	EOC-9510#B	9560		The EOC shall support the following simultaneous activities: a. Performing mission coordination, planning,			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1089A

				scheduling, monitoring, and commanding of the U.S. spacecraft and instruments as listed in Table D-1. b. At least two of the following: mission test activities, EOC system upgrades, training, and/or maintenance										
CT	EOC-9510#B										verified		verified	
CC	EOC-9520#B	3822		The EOC computer hardware shall be able to grow without redesign to twice the processing, storage, and communic			mission essential	FOS	functional	analysis	~~un-verified~~	analysis		

				ations capacities estimated for full system operation.										
CT	EOC-9520#B										verified		verified	
CC	EDOS-4.1.1.3#B	8102		EDOS shall provide the capability to transfer return link real-time Path Service EDOS Data Units (EDUs) to the EOC.		EDOS generates EDUs by concatenating an EDOS service header (ESH) with each applicable return link path service data unit (SDU).	mission critical	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	96-1132B
CT	EDOS-4.1.1.3#B										verified		verified	
CC	EDOS-4.1.1.4#B	8103		EDOS shall provide the capability to transfer Command Link Control Word (CLCW) EDUs to the EOC.			mission critical	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	96-1132B
CT	EDOS-4.1.1.4#B										verified		verified	
CC	EDOS-	8106		EDOS		Applicabl	mission	FOS	interface	demo	~~un-~~	demo	~~un-~~	96-1132B

	4.1.1.8#B			shall provide the capability to transfer Rate Buffered Data to the EOC, as specified in Applicable Document 1.		e document referenced is identified in section 2.0 of EDOS IRD, 560-EDOS-0211.0001	critical				~~verified~~		~~verified~~	
CT	EDOS-4.1.1.8#B										verified		un-verified	
CC	EDOS-4.2.1.4#B	9605	B	The EDOS-EOC interface shall provide the capability to support the transfer of real-time return link data at a rate of up to 32 kbps.			mission critical	FOS | CSMS	performance | interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A
CT	EDOS-4.2.1.4#B										verified		verified	
CC	EDOS-4.2.1.5#B	9606		The EDOS-EOC interface shall			mission critical	FOS	performance | interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A

				provide the capability to support the transfer of real-time forward link data at a rate of up to 10 kbps.										
CT	EDOS-4.2.1.5#B										verified		verified	
CC	EDOS-4.6.1.2#B	9495		EDOS shall transfer real-time return link data using UDP/IP.			mission critical	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A
CT	EDOS-4.6.1.2#B										verified		verified	
CC	EDOS-4.6.1.3#B	9496		EDOS shall receive real-time forward link data using UDP/IP.			mission critical	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A
CT	EDOS-4.6.1.3#B										verified		verified	
CC	EDOS-4.6.1.5#B	9498		EDOS shall transfer CODA reports using UDP/IP.			mission critical	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A
CT	EDOS-4.6.1.5#B										verified		verified	

CC	EDOS-4.6.1.6#B	9499		EDOS shall transfer non-CODA Operations Management data using FTP.			mission essential	FOS	interface	demo	~~un-verified~~	demo	~~un-verified~~	97-1134A
CT	EDOS-4.6.1.6#B										verified		verified	
CC	EOSD0025#B	7094	B	ECS shall use EBnet for flight operations data transfers.			mission critical	FOS | CSMS	functional | operational | interface	test	~~un-verified~~	test	~~un-verified~~	97-0742A
CT	EOSD0025#B										verified		verified	
CC	EOSD0560#B	8841	B0B	ECS benchmark tests and test data sets shall be defined for system verification and data quality evaluation.		As part of acceptance test procedures (411/VE1) we will define a set of bench mark tests and associated test data that will be maintained under configuration control.	mission essential	FOS | SDPS | CSMS	operational | procedural	inspection	~~un-verified~~	inspection	~~un-verified~~	97-0746A

CT	EOSD0560#B										verified		verified	
CC	EOSD0700#B	8843	B0B	Each ECS element shall provide the following, to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.		As part of acceptance test procedures (411/VE1) we will define a set of bench mark tests and associated test data that will be maintained under configuration control.	mission essential	FOS | SDPS | CSMS	operational | procedural	inspection	~~un-verified~~	inspection	~~un-verified~~	97-0746A
CT	EOSD0700#B										verified		verified	
CC	EOSD0720#B	8848	B0B	Each ECS element shall be able to validate at any time during the life-time of the ECS that the ECS element primary functional performance is			mission critical	FOS | SDPS | CSMS	operational | procedural	test	~~un-verified~~	test	~~un-verified~~	97-0746A

				consistent with pre-defined operational benchmark tests.										
CT	EOSD0720#B										verified		verified	
CC	EOSD0730#B	9613	B0B	Each ECS element shall be capable of verifying the fidelity of the ECS element interface to: a. Other ECS elements at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS			mission critical	FOS | SDPS | CSMS	operational | procedural	test	~~un-verified~~	test	~~un-verified~~	97-1134A
CT	EOSD0730#B										verified		verified	
CC	EOSD0740#B	9157	B0B	Each ECS element shall			mission fulfillment	FOS | SDPS | CSMS	operational | procedural	test	~~un-verified~~	test	~~un-verified~~	97-0746A

				provide a set of real or simulated functional capabilities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. ECS System (Integration of ECS elements)										
CT	EOSD0740#B										verified		verified	
CC	EOSD0750#B	9153	B0B	Each ECS element shall provide a set of real or simulated functions which interfaces with both its ECS			mission fulfillment	FOS | SDPS | CSMS	operational | procedural	demo	~~un-verified~~	demo	~~un-verified~~	97-0746A

				internal and external entities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. EOSDIS System (Integration of EOSDIS elements)										
CT	EOSD0750#B										verified		verified	
CC	EOSD0760#B	9000	B0B	Each ECS element shall support end-to-end EOS system testing and fault isolation.		FULL AM-1 END-TO-END TESTING	mission critical	FOS | CSMS	operational | procedural	demo	~~un-verified~~	demo	~~un-verified~~	97-0746A
CT	EOSD0760#B										verified		verified	
CC	EOSD148	8866	B0B			The LSM	mission	FOS |	interface	demo	~~un-~~	demo	~~un-~~	97-0746A

	0#B			ECS shall receive from the resident EOS Project Scientist the IWGs Long Term Science Plan (LTSP) and updates as required.		is responsible for providing system wide scheduling information via SMC-1315.	fulfillment	SDPS | CSMS			~~verified~~		~~verified~~	
CT	EOSD1480#B										verified		verified	
CC	EOSD1510#B	8874	B	ECS elements shall provide the FDF with subsets of spacecraft housekeeping data related to the on-board attitude and orbit systems.			mission critical	FOS | CSMS	interface	test	~~un-verified~~	test	~~un-verified~~	97-0742A
CT	EOSD1510#B										verified		verified	
CC	EOSD1690#B	6222	B	ECS elements shall provide			mission essential	FOS	interface	test	~~un-verified~~	test	~~un-verified~~	97-0742A

				commands to the EOS spacecraft simulators.										
CT	EOSD1690#B										verified		verified	
CC	EOSD3820#B	8955	B	The FOS shall have an operational availability of 0.992 at a minimum (.99997 design goal) and an MDT of one (1) hour or less (0.5 minute design goal) for functions associated with Targets Of Opportunity (TOOs).			mission critical	FOS	RMA	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0742A
CT	EOSD3820#B										verified		verified	
CC	ICC-0040#B	4065		The ICC shall receive the LTSP			mission essential	FOS | CSMS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B

				and LTIP from the SMC.										
CT	ICC-0040#B										verified		verified	
CC	ICC-1130#B	6186		In support of a TOO observation, the ICC shall be able to evaluate the corresponding request within 30 minutes.		EOC to ICC interface.	mission critical	FOS	functional	test	~~un-verified~~	demo	~~un-verified~~	97-1090B
CT	ICC-1130#B										verified		verified	
CC	ICC-2110#B	4082		The ICC shall be capable of converting PI/TL provided instrument deviation requests into scheduling directives suitable for inclusion in its instrument resource profile.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B
CT	ICC-										verified		verified	

	2110#B													
CC	ICC-2390#B	7938		The ICC shall provide the EOC with the instrument activity list or instrument activity deviation list (when an activity profile exists for the instrument) and any updates thereto, when generated.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.		mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	96-0980B
CT	ICC-2390#B										verified		verified	

CC	ICC-4020#B	4533		The ICC shall provide the capability to accept CCSDS packets from EDOS containing at a minimum the following data types: a. Spacecraft and instrument housekeeping data b. Instrument engineering data or instrument science data within which instrument engineering data is embedded c. Instrument memory dump data			mission critical	FOS | CSMS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B
CT	ICC-4020#B										verified		verified	
CC	ICC-4045#B	4546		The ICC			mission critical	FOS	functional	test	~~un-verified~~	test		

				shall provide the capability to extract instrument housekeeping data and relevant spacecraft parameters from the spacecraft and instrument housekeeping data stream.										
CT	ICC-4045#B										verified		verified	
CC	ICC-4170#B	4593		The ICC shall provide the capability to determine the best estimate for instrument memory contents.			mission critical	FOS	functional	test	~~un-verified~~	test		
CT	ICC-4170#B										verified			
CC	ICC-4180#B	4597		The ICC shall be able to process 24			mission essential	FOS	functional	test	~~un-verified~~	test		

				hours of spacecraft recorder instrument housekeeping and engineering data within 2 hours.										
CT	ICC-4180#B										verified		verified	
CC	ICC-4540#B	4676		The ICC shall monitor the configuration of the instrument.			mission critical	FOS	functional	demo	~~un-verified~~	demo		
CT	ICC-4540#B										verified		verified	
CC	ICC-4560#B	4680		The ICC shall maintain a record of the instrument configuration, including the state of instrument subsystems.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B
CT	ICC-4560#B										verified		verified	
CC	ICC-4580#B	4682		The ICC			mission critical	FOS	functional	test	~~un-verified~~	test		

				shall provide the capability to compare the master ground image and the instrument memory dump.										
CT	ICC-4580#B										verified			
CC	ICC-4760#B	4702		The ICC shall generate a report identifying any problems with the contents of the IDB.			mission critical	FOS	functional	test	~~un-verified~~	test		
CT	ICC-4760#B										verified			
CC	ICC-4770#B	4706		The ICC shall accept updates to the IDB from the IST.			mission essential	FOS	functional	test	~~un-verified~~	test		
CT	ICC-4770#B										verified		verified	
CC	ICC-4775#B	4709		The ICC shall			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1090B

				provide the EOC with the instrument -specific portion of the PDB and/or updates thereto.										
CT	ICC-4775#B										un-verified		un-verified	
CC	ICC-4830#B	4732		The ICC shall be capable of storing documentation on-line for operator support, including at a minimum the following: a. Operator guides b. Operational procedures			mission essential	FOS	functional	inspection	~~un-verified~~	inspection		
CT	ICC-4830#B										verified		un-verified	
CC	ICC-6010#B	4739		The ICC shall participate in the			mission critical	FOS	functional	demo	~~un-verified~~	demo		

				scheduling of interface and end-to-end tests with the external elements involved including the EOC, the SMC for other EOS elements, and EDOS for MO&DSD data delivery systems.										
CT	ICC-6010#B										verified		verified	
CC	ICC-6030#B	4744		The ICC shall perform prepass operational readiness tests on the ICC and between the ICC and external interfaces (via test messages).			mission critical	FOS	functional	demo	~~un-verified~~	demo		
CT	ICC-	verified									verified		verified	

	6030#B													
CC	ICC-6070#B	4749		The ICC shall manage initialization and shutdown of ICC functions.			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B
CT	ICC-6070#B										verified		verified	
CC	ICC-6140#B	4765		The ICC shall provide tests for validating, verifying, and checking functional capabilities and performance for ICC functions after the ICC has been repaired or upgraded.			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1090B
CT	ICC-6140#B										verified		verified	
CC	ICC-6145#B	4767		The ICC shall provide standard test data sets to be			mission essential	FOS	functional	inspection	~~un-verified~~	inspection	~~un-verified~~	97-1090B

				used in the validation of the ICC functions.										
CT	ICC-6145#B										verified		verified	
CC	ICC-6150#B	4768		The ICC shall provide the capability to support the instrument integration test activities associated with the instrument testing, spacecraft and instrument integration testing, and launch site testing.			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1090B
CT	ICC-6150#B										verified		verified	
CC	ICC-6195#B	4770		The ICC shall provide the capabilities: a. To test both			mission essential	FOS	functional	demo	~~un-verified~~	demo		

				nominal operations and failure paths b. To log test activities and configuration c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results										
CT	ICC-6195#B										un-verified			
CC	ICC-6600#B	4850		The ICC shall respond to user inputs within 0.5 seconds.			mission critical	FOS	functional	demo	~~un-verified~~	demo	~~un-verified~~	97-1090B
CT	ICC-6600#B										verified		verified	
CC	ICC-7050#B	4854		The IST shall have the capability to provide			mission essential	FOS	functional	test	~~un-verified~~	test		

				the ICC with updates to the IDB.										
CT	ICC-7050#B										verified		verified	
CC	ICC-7210#B	4858		The IST shall provide the capability to generate a request for an instrument activity and submit it to the ICC.		B: Enhanced functionality provided.	mission essential	FOS	functional	test	~~un-verified~~	test		
CT	ICC-7210#B										verified		verified	
CC	ICC-7214#B	7943		The IST shall interface with the ICC to receive notification of request for instrument support activity receipt.		B: Enhanced functionality provided. Timeline display of scheduled activities.	mission essential	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	96-0980B
CT	ICC-7214#B										verified		verified	
CC	ICC-8010#B	4908		The ICC			mission critical	FOS	functional	test	~~un-verified~~	test		

				shall be capable of supporting the following simultaneous activities: a. Performing mission coordination, planning, scheduling, monitoring, and commanding of its instruments. b. At least two of the following: mission test activities, ICC system upgrades, training, and/or maintenance.										
CT	ICC-8010#B										<u>verified</u>		<u>verified</u>	
CC	ICC-8020#B	4911		The ICC computer hardware shall be able to			mission critical	FOS	functional	test	~~un-verified~~	test	~~un-verified~~	97-1090B

				grow without redesign to twice the processing, storage, and communications capacities estimated for full system operation.										
CT	ICC-8020#B										verified		verified	
CC	NI-0150#B	9580	FPB	ECS shall have the capability to send other non-telemetry data messages to the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC			mission essential	FOS	interface	test	~~un-verified~~	test	~~un-verified~~	97-1134A

				MOCs and the NCCDS.										
CT	NI-0150#B										verified		verified	
CC	NI-1010#B	9218		The ECS FOS shall have an operational availability of 0.9998 at a minimum and a MDT of one (1) minute or less for critical real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe			mission critical	FOS	interface	analysis	~~un-~~ verified	analysis	~~un-~~ verified	97-0164A

				mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety										
CT	NI-1010#B										verified		verified	
CC	NI-1030#B	9219		The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for non-critical real time functions.			mission essential	FOS	interface	analysis	~~un-verified~~	analysis	~~un-verified~~	97-0416
CT	NI-1030#B										verified		verified	
EOT														